



INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NUMBER YOR920040078US1 SERIAL NUMBER 10/709,127 FILED 04/15/04
FIRST INVENTOR: Peter Franaszek TITLE METHOD, SYSTEM AND STORAGE MEDIUM
FOR PREFETCHING VIA MEMORY BLOCK TAGS

EXAMINER n/a

ART UNIT n/a

1. ☒ Applicant submits herewith a copy of (a) attached form PTO-1449, which lists all patents, publications, applications, or other information submitted for consideration by the Office; (b) a legible copy of each document required by 37 C.F.R. §1.98(b)(2).
2. ☐ Applicant herein apprises the Patent Office of references cited in a parent U.S. application from which this application obtains the benefit of an earlier filing date under 35 U.S.C. §120. The Serial Number of the parent application is U.S. Application _____ filed _____ and entitled _____.
The publications cited therein are listed on attached Form PTO-1449. In accordance with 37 C.F.R. §1.98(d) copies of the listed publications are not required. ☐ Additional parent patent applications are listed on an attached sheet.
3. ☐ In accordance with 37 C.F.R. §1.98(a)(3), Applicant hereby certifies that for each reference not in English (check at least one box below):
☐ A copy of a translation of one or more non-English document, or portion thereof, is provided herewith;
☐ A concise explanation is (check at least one box below):
☐ provided in the accompanying foreign or international search report; ☐ incorporated into the specification; and/or ☐ provided herewith.

37 C.F.R. §1.97(b)(1), (b)(2) – WITHIN 3 MONTHS OF FILING OR ENTRY IN NATIONAL STAGE

4. ☒ Since this Information Disclosure Statement is being filed within three months of the filing date of the subject application or within three months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application, no fee or certification under 37 C.F.R. §1.97(e) is required.

37 C.F.R. §1.97(b)(3), (b)(4) – PRIOR TO MAILING OF FIRST OFFICE ACTION OR FIRST ACTION AFTER REQUEST FOR CONTINUED EXAMINATION

5. ☐ Since this Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, or before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. §1.114, no fee or certification under 37 C.F.R. §1.97(e) is required.

37 C.F.R. §1.97(c) – AFTER FIRST ACTION, BEFORE FINAL ACTION OR ALLOWANCE

6. ☐ Since this Information Disclosure Statement is being filed outside of the period provided for in 37 C.F.R. §1.97(b), but before the mailing date of a Final Rejection or Notice of Allowance, this submission is being accompanied by (one of the following boxes must be checked):
 - a. ☐ the fee required under 37 C.F.R. §1.97(c)(2) and specified in 37 C.F.R. §1.17(p).
 - b. ☐ the statement specified in 37 C.F.R. §1.97(e) (Box 8 or 9 must be checked).

37 C.F.R. §1.97(d) – AFTER FINAL REJECTION OR ALLOWANCE

7. ☐ Since this Information Disclosure Statement is being filed after the period specified in 37 C.F.R. §1.97(c), but on or before payment of the issue fee and is accompanied by both the statement specified in 37 C.F.R. §1.97(e) and the fee set forth in 37 C.F.R. §1.17(p). (Box 8 or 9 must be checked.)
8. ☐ In accordance with 37 C.F.R. §1.97(e)(1), Applicant's attorney certifies that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. ☐ The foreign or international search report(s) is/are enclosed.
9. ☐ In accordance with 37 C.F.R. §1.97(e)(2), Applicant's attorney certifies that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of the information disclosure statement.
10. ☒ In the event the Commissioner of Patents deems that any additional fee is required under 37 C.F.R. §§ 1.16 or 1.17 in connection with this application, Applicant's attorneys authorize that such fee be charged to Deposit Account No. 50-0510.
11. Consideration of this Information Disclosure Statement is respectfully requested.

Name: <u>Anne Davis Barry</u>	Registration Number: <u>47,408</u>
Signature: <u>[Signature]</u>	Date: <u>April 26, 2004</u>

CERTIFICATE OF MAILING OR TRANSMISSION: I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or [] facsimile transmitted to the Patent and Trademark Office to Facsimile No. _____ on the date shown below.

Name: <u>Jane M. Theberge</u>	Date: <u>April 26, 2004</u>
Signature: <u>[Signature]</u>	

FORM PTO 1449
(REV 2-32)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

File No.
YOR920040078US1

Serial No.
10/709,127

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Use several sheets if necessary)

Applicant(s):
Fraszcek et al.

Filing Date:
April 15, 2004

Group:
N/A

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1	4,807,110	02/21/1989	Pomerene et al.	711	213	04/06/1984
	2	5,361,391	11/01/1994	Westberg	395	425	06/22/1992
	3	5,715,421	02/03/1998	Akiyama et al.	395	421.03	10/16/1992
	4	5,761,706	06/02/1998	Kessler et al.	711	118	11/01/1994
	5	5,796,971	08/18/1998	Emberson	395	383	08/22/1997
	6	5,887,151	03/23/1999	Raz et al.	395	382	07/10/1997
	7	6,134,643	10/17/2000	Kedem et al.	711	213	11/26/1997
	8	6,182,201 B1	01/30/2001	Arimilli et al.	711	202	04/14/1997
	9	6,286,075 B1	09/04/2001	Stracovsky et al.	711	5	11/12/1999
	10	6,535,961 B2	03/18/2003	Wilkerson et al.	711	137	11/21/1997
	11	6,598,123 B1	07/22/2003	Anderson et al.	711	133	06/28/2000
	12	6,606,617 B1	08/12/2003	Bonner et al.	707	2	05/28/1999
	13	6,678,795 B1	01/13/2004	Moreno et al.	711	137	08/15/2000
	14	6,687,794 B2	02/03/2004	Malik	711	137	10/18/2001
	15	2003/0221069 A1	11/27/2003	Azevedo et al.	711	136	05/22/2002
	16	2004/0030840 A1	02/12/2004	Hesse et al.	711	137	06/19/2003

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1	EP0173893 A2	03/12/1986	European			
	2	JP8161230	06/21/1996	Japan			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

	1	Adaptive Variation of the Transfer Unit in a Storage Hierarchy, IBM J. Res. Develop., Vol. 22, No.4, July 1978, pp. 405-412 - by P.A. Fraszcek and B. T. Bennett.
	2	Distributed Prefetch-buffer/Cache Design for High Performance Memory Systems, pp 254-263, Departments of Computer Science and Electrical Engineering, Duke University, Durham, NC, 1996 - by Thomas Alexander and Gershon Kedem.
	3	DRAM-Page Prediction and Prefetching, pp. 267-275, Computer Science Department, Duke University, Durham, NC, 2000 by Haifeng Yu and Gershon Kedem.
	4	On the Stability of Temporal Data Reference Profiles, Microsoft Research, Redmond, WA - by Trishul M. Chilimbi
	5	TCP: Tag Correlating Prefetchers, by Zhigang Hu of IBM Corp.; Margaret Martonosi of Princeton University; and Stefanos Kaxiras of Agere Systems.
	6	Performance Study of the Filter Data Cache on a Superscalar Processor Architecture, by Julio Sahuquillo, Salvador Petit and Ana Pont of Universidad Politecnica de Valencia, Spain and Veljko Milutinovic of University of Belgrade, Yugoslavia.
	7	A Data Cache with Multiple Caching Strategies Tuned to Different Types of Locality, by Antonio Gonzalez, Carlos Aliagas and Mateo Valero of Universitat Politecnica de Catalunya, Barcelona, Spain.
	8	Filtering Superfluous Prefetches using Density Vectors by Wei-Fen Lin, Steven K. Reinhardt of University of Michigan; Doug Burger of University of Texas at Austin; and Thomas R. Puzak of IBM Corporation.
	9	Page Fault Behavior and Prefetching in Software DSMs, by Ricardo Bianchini, Raquel Pinto, and Claudio L. Amorim of Federal University of Rio de Janeiro, Brazil, Technical Report ES-401/96, July 1996.
	10	Adaptive Caching for Demand Prepaging, by Scott F. Kaplan, Lyle A. McGeoch, and Megan F. Cole of Amherst College, Massachusetts - ISMM '02, June 20-21, 2002, Berlin Germany
	11	Time Series Prediction using Recurrent SOM with Local Linear Models, Research Reports B15, Oct. 1997 - by Timo Koskela, Markus Varsta, Jukka Heikkonen, and Kimmo Kashi of Helsinki University of Technology, Finland.
	12	Temporal Sequence Processing using Recurrent SOM, by Timo Koskela, Markus Varsta, Jukka Heikkonen, and Kimmo Kaski of Helsinki University of Technology, Finland.

Examiner

Date considered

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.